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## Foreign Documents Branch C I A Periodical Abstracts

27 Sep 1948

SCIENTIFIC

Number 70

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<u>Russian Periodicals</u>		
"Gigiyena i Sanitariya" (Hygiene and Sanitation) Cards 88-97	Vol XIII No 5	May 1948
"Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk" (News of the Academy of Sciences of the USSR, Department of Technical Sciences) Cards 25-33, 104	No 4	Apr 1948
"Kolloidnyy Zhurnal" (Colloid Journal) Cards 3-8, 106, 107	Vol X No 2	Mar/Apr 1948
"Mekhanizatsiya Stroitel'stva" (Mechanization of Construction) Cards 41-44	No 4	Apr 1948
"Mikrobiologiya" (Microbiology) Cards 45-55	Vol XVII No 2	Mar/Apr 1948
"Nevropatologiya i Psikhatriya" (Neuropathology and Psychiatry) Cards 56-65	Vol XVII No 2	Mar/Apr 1948
"Vestnik Oto-Rino-Laringologii" (Herald of Otorhinolaryngology) Cards 78-87	Vol X No 2	Mar/Apr 1948
"Vestnik Venerologii i Dermatologii" (Herald of Venereology and Dermatology) Cards 69-77	No 2	Mar/Apr 1948
"Voprosy Neyrokhirurgii" (Problems of Neurosurgery) Cards 98-103	No 2	Mar/Apr 1948
"Zhurnal Prikladnoy Khimii" (Journal of Applied Chemistry) Cards 9-24	Vol XII No 3	Mar 1948
<u>Yugoslavian Periodicals</u>		
"Elektrotehnicki Vestnik" (Electrical Engineering Herald) Cards 34-40	No 6	1947
"Mladi Elektrotehnicar" (Young Electrical Engineer) Card 105	No 6	Oct 1947
"Nauka i Tehnika" (Science and Technology) Cards 1, 2, 66-68	No 2	Feb 1948

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NOTE

In indexing these abstracts the following guides are used: MEDICINE - "Quarterly Cumulative Index Medicus," American Medical Association; CHEMISTRY - "Chemical Abstracts Subject Index," American Chemical Society; GENERAL - "Subject Headings for Technical Libraries," US Department of Commerce, Office of Technical Services.

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Total	116

## FDB Periodical Abstracts Scientific No 70

<p>USSR/Academy of Sciences Feb 1948</p> <p>"Review of S. I. Vavilov's Book, 'The Thirtieth Anniversary of Soviet Science'," V. M. Aleksijevic, 4 pp</p> <p>"Nauka i Tehnika" No 2</p> <p>Vavilov's book is summary of Soviet science, including survey by Engr Slavko Boksan of Russian naturalists prior to the Revolution and since.</p>	<p>YUGOSLAVIA/Chemistry - Chemical Industry Feb 1948 Chemistry - Carbon, Activated</p> <p>"Activated Carbon and Its Role in Industry," Fran Podbreznik, Dr Engr, 7 pp</p> <p>"Nauka i Tehnika" No 2</p> <p>Discusses very generally methods of obtaining, treatment, uses, and characteristics of activated carbon.</p>
<p>FDB 70T1</p> <p>USSR/Chemistry - Bioliths, Caustic Mar/Apr 1948 Chemistry - Olefins</p> <p>"Caustic Bioliths, Containing High Polymeric Compounds," L. D. Melikadze, T. A. Eliava, Chem Inst, Acad Sci, Gruzia SSR, 9 pp</p> <p>"Kolloid Zhur" Vol X, No 2</p> <p>Discusses and evaluates results obtained in experiments. Among conclusions based on data obtained: that the physical and chemical properties of the primary type of mineral and the contents of high polymeric couchouc-type compounds of the olefin series permitted authors to isolate the caustic biolith in question from series of well-known organic minerals. Submitted 10 May 1947.</p>	<p>FDB 70T2</p> <p>USSR/Chemistry - Rubber, Vulcanization of Mar/Apr 1948 Chemistry - Vulcanization</p> <p>"Research in the Field of Vulcanizing of Rubber: VI. Change of the Modulus of Diametric Elongation in the Vulcanizing of Natural and Butadiene Styrene Rubber," B. Dogadkin, G. Bartenev, N. Novikova, Moscow Inst of Fine Chem Technol imeni M. V. Lomonosov, Chair of Chem and Phys of Couchouc, 9 pp</p> <p>"Kolloid Zhur" Vol X, No 2</p> <p>Describes method employed in the operation, methods to measure the modulus of diametric elongation, structural processes during vulcanization, and conclusions reached from the experiments. Submitted 15 Jan 1948.</p>
<p>FDB 70T3</p> <p>USSR/Chemistry - Dispersed Systems Mar/Apr 1948 Chemistry - Electrolytes</p> <p>"Electrical Vibrations in Dispersed Systems," Ya. I. Frenkel', Polytechnical Inst, Leningrad, 6 1/2 pp</p> <p>"Kolloid Zhur" Vol X, No 2</p> <p>Describes electrical vibrations in flat-parallel layers of electrolytes, in round droplets. Applies the data obtained to live tissues. Submitted 28 Aug 1947.</p>	<p>FDB 70T4</p> <p>USSR/Chemistry - Surface Tension, Mar/Apr 1948 Calculation of Chemistry - Bubbles, Formation of</p> <p>"Experimental Research in Determining the Surface Tension of Fluids by the Maximum Pressure for the Formation of Bubbles," B. Ya. Teytel'baum, Lab of Phys and Colloidal Chem, Rostov State U imeni V. M. Molotov, 9 pp</p> <p>"Kolloid Zhur" Vol X, No 2</p> <p>Photoregistering manometer was used in experiments to determine the pressure changes during the formation of bubbles under various conditions. Measurements of the pressure fall after the formation of</p>
<p>FDB 70T5</p> <p>USSR/Chemistry - Dispersed Systems Mar/Apr 1948 Chemistry - Heat of Hydration</p> <p>"Lyophilis of Dispersed Systems: II. Heat of Hydration of Starches, Gelatins, Agar, and Silicon Anhydride With Water and Alcohol," A. V. Dumanskiy, Ya. F. Mezhenyy, Ye. F. Nekryach, Colloidal Lab, Inst of Gen and Inorg Chem, Acad Sci USSR, 9 pp</p> <p>"Kolloid Zhur" Vol X, No 2</p> <p>Discusses the heat of hydration of starchy water and alcohol, starchy water and sugar, solutions of starch and water and alcohol and water, gelatin and agar with alcohol and alcohol solutions, and silicon anhydride powder. Gives conclusions obtained as result of the experiments. Submitted 2 Jan 1948.</p>	<p>FDB 70T6</p> <p>USSR/Chemistry - Surface Tension, Mar/Apr 1948 Calculation of (Contd)</p> <p>gas bubble are recommended as means of oriented determination of tension. Submitted 25 Mar 1947.</p>
<p>FDB 70T7</p>	<p>FDB 70T6</p>

RESTRICTED	FDB Periodical Abstracts Scientific No 70	RESTRICTED
USSR/Chemistry - Drops, Noncoalescence of Mar/Apr 1948 Chemistry - Colloids	USSR/Chemistry - Borneol Mar 1948 Chemistry - Terpenes, Catalytic Transformation	
"Causes for the Noncoalescence of Water Droplets in Collision," P. S. Prokhorov, V. N. Yashin, Lab of Surface Forces, Inst of Phys Chem, Acad Sci USSR, 2½ pp	"Catalytic Changes of Monocyclic Terpenes, Pinene, and Borneol, Report I," K. S. Kuryndin, 8 pp	
"Kolloid Zhur" Vol X, No 2	"Zhur Prik Khim" Vol XXI, No 3	
Describes apparatus, and experiments conducted to determine subject phenomenon. Submitted 21 Apr 1947.	"Residual turpentine" otherwise known as "borneol oil," mixture of monocyclic terpenes and borneol, undergoes considerable changes when heated to 200-450° in contact with bleaching clay. Describes changes in detail. The oil can be completely transformed into mixture of aromatic and naphthenic hydrocarbons by heating to 380-450°; up to 20% of n-cymene can be extracted from this mixture. Submitted 3 Sep 1945. Resubmitted 10 Nov 1947.	
FDB 70T8	FDB 70T9	
USSR/Chemistry - 1-Butene, Isomerization of Mar 1948 Chemistry - Gumbrin	USSR/Chemistry - Electrolysis Mar 1948 Chemistry - Anions	
"Investigation of Gumbrin and Askanite as Dehydrating and Isomerizing Contacts: II. Contact Isomerization of 1-Butene," Kh. I. Areshidze, Ye. K. Tavarmkiladze, Lab of Org Chem imeni Prof P. G. Milikishvili, Tbilisi, State U imeni Stalin, 3 pp	"The Problem of the Influence of Anions on Electrode Processes," O. Kudra, E. Gitman, 5 pp	
"Zhur Prik Khim" Vol XXI, No 3	"Zhur Prik Khim" Vol XXI, No 3	
Performed experiments to investigate changes undergone by the unsaturated hydrocarbon, 1-butene, in contact with gumbrin. Established that 1-butene is isomerized into 2-butene and isobutylene. Submitted 27 May 1947.	For cadmium and manganese nitrate solutions, the potentials of formation of loose cathode deposits are sensibly lower than those for solutions of other salts of these metals. It was suggested that this was connected with the oxidizing action of the NO <sub>3</sub> ion. The described experiments with zinc and lead salts at various current densities, however, show that this is not the case. Submitted 2 Jun 1947.	
FDB 70T10	FDB 70T11	
USSR/Chemistry - Acrylic Acid, Methyl Ester Mar 1948 Chemistry - Vapor Tension	USSR/Chemistry - Sulfides, Di-, Xanthogen Mar 1948 Chemistry - Synthesis	
"Relation of Vapor Tension of the Methyl Ester of Acrylic Acid to Temperature," S. A. Yermolaeva, I. A. Korshunov, Gor'kiy State U, 2 pp	"Xanthogen Disulfides," S. V. Zhuravlev, Sci Res Lab of Experimental Chem Therapy, Ministry of Pub Health USSR, Moscow, 6 pp	
"Zhur Prik Khim" Vol XXI, No 3	"Zhur Prik Khim" Vol XXI, No 3	
The vapor tension of the ester was determined for temperatures 10-60°, using the described apparatus. P was then plotted against t and log P against $\frac{1}{T}$ .	Number of xanthogen disulfides (methyl, ethyl, propyl, etc.) were synthesized by oxidizing alkyl-xanthogen with nitrous acid. Lower members of the series are more insecticidal than the higher. Submitted 10 Feb 1947.	
From these curves, the molecular heat of evaporation is 9,630 cal/gm mol and the boiling point at 760 mm pressure is 99.50 C. From these data, Trouton's constant was calculated to be 25.8. Submitted 1 Apr 1947.		
FDB 70T12	FDB 70T13	
USSR/Chemistry - Betaine Chlorohydrates Mar 1948 Chemistry - Synthesis	USSR/Chemistry - Systems, Binary Mar 1948 Chemistry - Equilibrium	
"The Composition and Germicidal Activity of Organic Compounds: IV. Amides and Esters of Betaine Chlorohydrates," N. N. Mel'nikov, N. D. Sukhareva, O. P. Arkhipova, Chem Lab, Cen Sci Res Disinfection Inst, Ministry of Pub Health USSR, Moscow, 3 pp	"Investigation of Phase Equilibriums of Binary Systems: Acenaphthene-Fluorene, Phenanthrene-Acenaphthene and Phenanthrene-Fluorene, Report I," Yu. F. Klochko-Zhovnir, Lab of Phys Chem, Donets Industrial Inst, 4 pp	
"Zhur Prik Khim" Vol XXI, No 3	"Zhur Prik Khim" Vol XXI, No 3	
Series of subject compounds were synthesized and studied. (Most of these compounds have not been previously described.) Their bactericidal properties were tabulated, showing the concentration required to kill staphylococcus aureus. Submitted 1 Apr 1947.	Investigated equilibrium between the solid and liquid phases of the above systems by described method. Tabulates results, and constructs temperature-concentration diagrams for the first time. Submitted 2 Jun 1947.	
FDB 70T14	FDB 70T15	

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USSR/Chemistry - Cement Chemistry - Hydration Mar 1948	USSR/Chemistry - Copper Hydroxide, Solubility of Chemistry - Ammonia, Aqueous Solutions Mar 1948	
"The Kinetics of the Hydration of Various Types of Cement," V. V. Nekrasov, Chair of Chem Plodovoshchnov Inst imeni I. V. Michurin, 8 pp "Zhur Prik Khim" Vol XXI, No 3 In previous article in "Iz Ak Nauk SSSR, Otdel Tech Nauk" No 6, 1945, p 592, Nekrasov obtained an equation making possible the calculation of cement at any given time. Here he describes series of experiments with results in accordance with his formula, both for Portland and aluminous cements. Submitted 21 Feb 1947.	"Solubility of Copper Hydroxide in an Aqueous Solution of Ammonia," M. I. Arkhipov, Ivanovo Chem Technol Inst, 8 pp "Zhur Prik Khim" Vol XXI, No 3 Studied influence of additives and various factors on the solubility of copper hydroxide in aqueous ammonia in series of described experiments. Analyzes results and sets forth hypothesis affording satisfactory explanation of all phenomena observed by both author and previous investigators. Submitted 4 Feb 1947.	
FDB 70T16	FDB 70T17	
USSR/Chemistry - Vanadium Compounds, As Catalysts Chemistry - Sulfur Dioxide, Oxidation of Mar 1948	USSR/Chemistry - Adsorption, Equation for Chemistry - Adsorption, Nomographs for Mar 1948	
"Deterioration on Service of a Vanadium Catalyst for Oxidizing SO <sub>2</sub> ," G. D. Sirotkin, Ivanovo Chem Technol Inst, 4 pp "Zhur Prik Khim" Vol XXI, No 3 Analyzed sample obtained from the Chernorechensk chemical works, where sulfuric acid is manufactured by the contact process. Sirotkin considers the usual explanations of vanadium catalyst deterioration (arsenic and excessive temperatures) to be inapplicable in this case, and suggests that the trouble may be connected	"Nomographs for Langmuir's Equation," G. V. Vinogradov, L. P. Borodulin, 2 pp "Zhur Prik Khim" Vol XXI, No 3 Wide practical application of Langmuir's adsorption equation has led authors to increase its utility by constructing two nomographs. Claim that they are sufficiently accurate for all practical purposes. Submitted 22 Feb 1947. Two diagrams reproduced.	
FDB 70T18	FDB 70T19	
USSR/Chemistry - Vanadium Compounds, As Catalysts (Contd) Mar 1948	USSR/Chemistry - Calcium Carbonate Chemistry - Electrolytes Mar 1948	
with physicochemical transformations of silicon dioxide. Submitted 11 Jun 1947.	"Electrolytic Nature of Liquid Commercial Calcium Carbide," P. V. Gel'd, O. A. Yesin, F. G. Maron, Ural Industrial Inst imeni S. M. Kirov; Ural Sci Res Chem Inst, 9 pp "Zhur Prik Khim" Vol XXI, No 3 Discuss the structure of commercial calcium carbide in both solid and liquid states; in the latter state it is a strong electrolyte. Like molten silicates, its conductivity is mainly dependent on ions of small magnitude. Submitted 30 Jun 1947.	
FDB 70T18	FDB 70T20	
USSR/Chemistry - Hydrogen Ion, Concentration of Chemistry - Systems Mar 1948	USSR/Chemistry - Cement, Hydraulic, Harden- ing of Chemistry - Cement, Hydraulic, Hydration of Mar 1948	
"The Significance of the pH Value in MeSO <sub>4</sub> and MeO and H <sub>2</sub> O Systems," B. V. Gromov, 13 pp "Zhur Prik Khim" Vol XXI, No 3 Studied iron, aluminum, copper, zinc, cobalt, cadmium, and manganese systems. Obtained pH value of each system by experiment for various concentrations of the metal and plotted results on the same graph. Gromov claims that this diagram makes possible the solution of whole series of hydrometallurgical problems, many of which have hitherto been subjects of discussion. Gives examples of such problems. Submitted 27 Nov 1946. Resubmitted 22 Sep 1947.	"Use of the Contraction Method to Investigate Pozzuolana," V. V. Nekrasov, Chair of Chem Plodovoshchnov Inst imeni I. V. Michurin, 6 pp "Zhur Prik Khim" Vol XXI, No 3 Nekrasov describes series of experiments carried out on samples of materials used for the "pozzuolation" of cements. The results show that: 1. The reaction of pozzuolan with lime is accompanied by considerable contraction; 2. contraction curves for the hardening of Portland cement--pozzuolan mixture	
FDB 70T21	FDB 70T22	

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USSR/Chemistry - Mineral Wool, Manufacture of Mar 1948 Chemistry - Mineral Wools, Raw Material, Testing of	USSR/Chemistry - Cement, Hydraulic, Mar 1948 Hardening of (Contd)	
"Research on Raw Materials for the Production of Mineral Wool," V. F. Zhuravlev, M. M. Sychev, Lenin-grad Tech Inst, 8 pp	shows an increased rate of clinker hydration; 3. dry-ground pozzuolan may contain considerable amount of air. In neutral and acid mediums this is quickly displaced by water; in alkaline medium it remains in the system. Submitted 28 Apr 1947.	
"Zhur Prik Khim" Vol XXI, No 3		
Describe laboratory method to determine which of several samples of raw materials is most suitable for the manufacture of mineral wool. Tabulated results, showing characteristics of the samples. Submitted 8 Jun 1947.		
FDB 70T23	FDB 70T22	
USSR/Chemistry - Pyrene Mar 1948 Chemistry - Coal Tar	USSR/Chemistry - Liquids Apr 1948 Chemistry - Combustion	
"The Problem of the Amount of Pyrene and Other High-Boiling Compounds in Coal Tar, Pitch, and Pitch Distillates," P. P. Karpukhin, O. Ya. Tsyapkina, 5 pp	"Method of Estimating the Physicochemical Properties of Liquids, Particularly Their Combustibility," G. N. Khudyakov, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 5 pp	
"Zhur Prik Khim" Vol XXI, No 3	"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4	
Determined pyrene content by the authors' method. Dissolved about 1 gm of the fraction in nitrobenzole and added 1.3 cc bromine. Heated solution to 150° for 20 minutes. Then calculated quantity of pyrene in the fraction from the weight of tetrabromopyrene formed. Estimated amines by titration with 0.1 N solution of sodium nitrate, and anthracene by	Describes method and equipment for determining subject properties, particularly their combustibility. Method differs from existing practices in which the properties of liquid are determined by the speed of its evaporation from free surface due to the heat of radiation from heat source with constant temperature. Submitted Jan 1948.	
FDB 70T24	FDB 70T25	
USSR/Chemistry - Pyrene (Contd) Mar 1948	USSR/Chemistry - Carbon Apr 1948 Chemistry - Combustion	
Postovskiy's and Khmelevskiy's method. Extracted chrysene by treating the fraction with acetic acid, and recrystallizing the precipitate from ethyl alcohol. Submitted 30 Jun 1947.	"Combustion of Spherical Particles of Carbon. Influence of Secondary Reactions on Fundamental Characteristics of the Process," L. N. Khitrin, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 17 pp	
	"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4	
	Studied the effect of secondary chemical reactions on the process of the combustion of carbon. Theoretical analysis of the process of combustion of carbon sphere showed that secondary reactions may have powerful effect on basic characteristics of the	
FDB 70T24	FDB 70T26	
USSR/Electricity Apr 1948 Conductors	USSR/Chemistry - Carbon (Contd) Apr 1948	
"Theory of Bipolar Corona on Conductors," V. I. Popkov, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 15 pp	process and particularly on the rate of the specific speed of combustion. Results of the experiment may be applied to calculation of the coefficients of reaction quantity and rules of diffusion migration. Results also may be used as basis for computation of the combustion of fine carbon particles. Submitted Jan 1948.	
"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4		
Studied behavior of bipolar corona on conductors. Derived equations, describing the electric field of corona conductors, and fundamental behavior of bipolar corona. Shows conformity of theory with data obtained from the experiments. Submitted Feb 1948.		
FDB 70T27	FDB 70T26	



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USSR/Electricity  
Rectifiers  
Harmonics - Analysis

Apr 1948

"Analytic and Graphic Determination of the Magnitude and Phase of Higher Harmonics of Current and Voltage in Control Rectifiers Having Infinite Cathode Impedance," Ya. M. Chervonenkis, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 9 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

Determination of the magnitude and phase of higher harmonics of current and voltage is usually accomplished by breakdown into the Fourier series. Describes work showing that this is not the only method.

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USSR/Electricity (Contd)

Apr 1948

and that accurate formulas to determine the sine and cosine of the component harmonics and rectified voltage with the calculation of the angle of ignition  $\alpha$  and the angle of contact  $\gamma$  may be obtained on the basis of general electromagnetic laws without breakdown into the Fourier series' curves of complex configuration. Submitted Jan 1948.

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70T28

USSR/Electricity  
Synchronous Machines  
Circuits, Equivalent

Apr 1948

"New Equivalent Circuit for Salient Pole Synchronous Machines," V. M. Matyukhin, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 9 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

Describes circuit, which involves the Wheatstone bridge, and is effective for both synchronous and asynchronous operation. Includes diagrams and computation. Submitted Jan 1948.

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70T31

USSR/Electricity  
Electromagnet  
Mathematics, Applied

Apr 1948

"Equations for the Processes in an Electromagnet (Solenoid) With a Moving Armature," A. I. Moskvitin, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 8 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

Object of work described was to develop simple analytical method to study electromagnet with moving armature, and permit establishment of the functions in general form. Submitted Jan 1948.

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70T32

USSR/Electricity  
Transformers  
Magnetization

Apr 1948

"Operation of Direct Current Measuring Transformers During Active Loading," Yu. G. Tolstov, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 16 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

Cites results of study of subject operation. Treats in detail: ideal characteristic of magnetization, differential equations of measuring transformer, operation of measuring transformer with no load on the secondary circuit, and the effect of active load. Submitted Jan 1948.

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70T29

USSR/Electricity

Apr 1948

Harmonic Functions  
Currents, Electric - Alternating

"Use of Universal Alternating Current Computation Table for Tabulating Rates of Modified Bessel Functions," P. I. Zubkov, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 10 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

I. S. Bruk's study of the asynchronous operation of turbogenerator gives solution to the problem on apportionment of current to conductivity in its rotor shaft with calculation of magnetic anisotropy of the serrate surface. Zubkov uses experimental

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USSR/Electricity (Contd)

Apr 1948

method proposed by Bruk, based on use of linear elements and universal alternating current computation table to tabulate auxiliary functions, and reduces the time of calculation to one fifth. Results of the experimental and the calculated tabulation differ by not more than 2%. Submitted Feb 1948.

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70T30

USSR/Engineering  
Ignition  
Valves

Apr 1948

"Measuring the Angles of the Ignition and Extinction of Control Valves," A. L. Goffin, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 14 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4

Goffin discusses few methods proposed for measuring the angles of ignition and extinction of control valves, and presents some results from his own work on the problem. Submitted Jan 1948.

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USSR/Engineering Winches Apr 1948		USSR/Engineering Concrete Vacuum Apparatus Apr 1948		USSR/Engineering Concrete Vacuum Apparatus Apr 1948	
"Winch of Greater Cable Capacity," A. A. Vaynsen, Cand Tech Sci, MISI imeni Kuybyshev, 3½ pp		"Use of Compressors in Concrete-Vacuum Units," S. S. Gordon, Cand Tech Sci, VNIOMS, 2 pp		"Use of Compressors in Concrete-Vacuum Units," S. S. Gordon, Cand Tech Sci, VNIOMS, 2 pp	
"Mekh Stroi" No 4		"Mekh Stroi" No 4		"Mekh Stroi" No 4	
Describes construction of winch, additions made to make it accommodate more cable, and transmission and reduction used in the power drives.		Vacuum treatment of concrete is limited to construction sites where vacuum equipment can be set up. In some cases piston pumps have been used successfully, however, use of piston pumps for vacuum supply must be considered temporary measure.		Vacuum treatment of concrete is limited to construction sites where vacuum equipment can be set up. In some cases piston pumps have been used successfully, however, use of piston pumps for vacuum supply must be considered temporary measure.	
FDB 70T42		FDB 70T43		FDB 70T43	
USSR/Engineering Belts, Conveyor Kilns Apr 1948		USSR/Geology Calcium Carbonate Petrology Mar/Apr 1948		USSR/Geology Calcium Carbonate Petrology Mar/Apr 1948	
"Use of an Endless Conveyor for Transporting Brick to a Kiln," B. S. Kurdyayev, Engr, 1 p		"The Biogenous Formation of Calcium Carbonate," B. L. Isachenko, Inst of Microbiol, Acad Sci USSR, Moscow, 9½ pp		"The Biogenous Formation of Calcium Carbonate," B. L. Isachenko, Inst of Microbiol, Acad Sci USSR, Moscow, 9½ pp	
"Mekh Stroi" No 4		"Mikrobiol" Vol XVII, No 2		"Mikrobiol" Vol XVII, No 2	
Gives results of practical use of an endless conveyor at KasMetallurgStroy for transporting bricks from the drying sheds to the kilns. Includes diagram of plant layout.		Bacteria-formed calcium carbonates are widely distributed in nature. Thus it was possible on the basis of present-day deposits to trace the possible formation of Pre-Cambrian calcium deposits. Submitted 30 Oct 1947.		Bacteria-formed calcium carbonates are widely distributed in nature. Thus it was possible on the basis of present-day deposits to trace the possible formation of Pre-Cambrian calcium deposits. Submitted 30 Oct 1947.	
FDB 70T44		FDB 70T45		FDB 70T45	
USSR/Medicine - Silkworms Medicine - Viruses Mar/Apr 1948		USSR/Medicine - Bacteriophage Medicine - Bacteriolysis Mar/Apr 1948		USSR/Medicine - Bacteriophage Medicine - Bacteriolysis Mar/Apr 1948	
"Serodiagnosis of the Virus of the Yellow Mulberry Silkworm," Ye. T. Dikasova, Gen Asiatic Sci Res Inst of Silk Industry, Tashkent, 3 pp		"On the Nature of Bacteriophage: II. Refined Bacteriophage and Its Properties," A. Ye. Kriss, Ye. A. Rukina, Inst of Microbiol, Acad Sci USSR, Moscow, 13 pp		"On the Nature of Bacteriophage: II. Refined Bacteriophage and Its Properties," A. Ye. Kriss, Ye. A. Rukina, Inst of Microbiol, Acad Sci USSR, Moscow, 13 pp	
"Mikrobiol" Vol XVII, No 2		"Mikrobiol" Vol XVII, No 2		"Mikrobiol" Vol XVII, No 2	
Shows that with the aid of serum it is possible to determine the primary stages of the disease. Studies on the endogenic infusion of cocoons lead to determination of the degree of contamination of the silkworm moth. Submitted 4 Jan 1947.		Discusses fate of bacterial agents as result of the purification process: general nitrogen content in purified bacteriophage, the specificity and stability of purified bacteriophage, and some of the conclusions based on results obtained. Submitted 30 Oct 1947.		Discusses fate of bacterial agents as result of the purification process: general nitrogen content in purified bacteriophage, the specificity and stability of purified bacteriophage, and some of the conclusions based on results obtained. Submitted 30 Oct 1947.	
FDB 70T46		FDB 70T47		FDB 70T47	
USSR/Medicine - Yeast, Growth Medicine - Fermentation, Bacterial Mar/Apr 1948		USSR/Medicine - Microorganisms Medicine - Marine Organisms Mar/Apr 1948		USSR/Medicine - Microorganisms Medicine - Marine Organisms Mar/Apr 1948	
"Rapid Method for the Control of Growth of Yeast During Fermentation Processes," A. E. Smirnova, Sci Res Inst of Fermentation Industry, Ministry of Spice Industries of RSFSR, Moscow, 5 pp		"Characteristics of the Microflora of the Salt-Water Reservoirs of the Tamansk Peninsula," M. A. Messineva, Inst of Mineral Fuels, Acad Sci USSR, Moscow, 6½ pp		"Characteristics of the Microflora of the Salt-Water Reservoirs of the Tamansk Peninsula," M. A. Messineva, Inst of Mineral Fuels, Acad Sci USSR, Moscow, 6½ pp	
"Mikrobiol" Vol XVII, No 2		"Mikrobiol" Vol XVII, No 2		"Mikrobiol" Vol XVII, No 2	
Turbidity of the ferment is positive indicator of the yeast concentrate. Describes method that determines the yeast concentrate with photoelectric nephelometer, permitting evaluation of the accumulation of yeast in the ferment during the growth process. Submitted 27 May 1947.		Discusses methods to determine the general amount of heterotrophic microorganisms, formation of gas due to the decomposition of albumin, denitrofication, disintegration of cells and fats, process of desulfurization, and conclusions based on results obtained. Submitted 16 Aug 1946.		Discusses methods to determine the general amount of heterotrophic microorganisms, formation of gas due to the decomposition of albumin, denitrofication, disintegration of cells and fats, process of desulfurization, and conclusions based on results obtained. Submitted 16 Aug 1946.	
FDB 70T48		FDB 70T49		FDB 70T49	

RESTRICTED		FDB Periodical Abstracts Scientific No 70		RESTRICTED			
USSR/Medicine - Bacteria Medicine - Wheat		Mar/Apr 1948		USSR/Medicine - Fungi, Poisonous Medicine - Poisons, Poisoning		Mar/Apr 1948	
<p>"Epiphytic Sporogenous Microflora of Wheat Kernels," L. Yu. Medvinskaya, V. S. Rozhdestvenskiy (Deceased), Inst of Microbiol imeni Zabolotniy, Acad Sci, Ukr SSR, Kiev, 5 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Conducted experiments on 42 sample wheat kernels to determine the existence of subject microflora. Observed nine common types of microflora: <i>B. cereus</i>, <i>B. mesentericus</i>, <i>B. saccharolyticus</i> n.sp., <i>B. migrans</i> n.sp., <i>B. mycoides</i>, <i>B. subtilis</i>, and <i>B. megatherium</i>. Submitted 28 Aug 1947.</p>				<p>"The Action of Extracts of Toxic Fungi on Animal and Plant Tissues," V. I. Bilay, Inst of Microbiol imeni Zabolotniy, Acad Sci, Ukr SSR, Kiev, 6 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Describes action of various extracts of toxic fungi on the decapillarized skin of rabbits, the toxic action of acetone extracts, <i>Dendrocochium toxicum</i>, <i>Fusarium poae</i>, and <i>Stachybotrys alternans</i> on the leaf and stem tissues of plants, and tests conducted to determine the toxic action of extracts of toxic fungi on the leaf tissues of various plants. Submitted 15 Feb 1947.</p>			
FDB		70T50		FDB		70T51	
USSR/Medicine - Fungi Medicine - Penicillin		Mar/Apr 1948		USSR/Medicine - Microorganisms Medicine - Ergosterol		Mar/Apr 1948	
<p>"Antagonism Between Mold Fungi," A. G. Romankova, Sci Res Lab, Citric Acid Works, Leningrad, 9 1/2 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Mold fungi, accompanied by growth and acid formation of <i>Asp. niger</i> in nonsterile conditions, are represented by <i>Penicillium</i>- and <i>Aspergillus</i>-type molds. <i>Pen. rugulosum</i> are antagonistic to <i>Asp. niger</i>. This is especially true when the former contain solutions of 15% citric acid. Gives other conclusions based on data obtained. Submitted 7 Aug 1946.</p>				<p>"On the Effect of Sterols on the Life Activity of Microorganisms: I. Physiological Significance of Ergosterol for Yeasts and Endomycetes," T. A. Tauson, Inst of Microbiol, Acad Sci USSR, Moscow, 6 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Determined that when ergosterol is added to agricultural (chemical) fertilizers, the biomass of the <i>Saccharomyces carlsbergensis</i> is greatly increased. Data obtained in experiments permit the conclusion that ergosterin, when present during the period of cell growth, displaces the reduction-oxidation.</p>			
FDB		70T52		FDB		70T53	
USSR/Medicine - Bacteriology Medicine - Taxonomy		Mar/Apr 1948		USSR/Medicine - Microorganisms (Contd)		Mar/Apr 1948	
<p>"The Classification of Bacteria," N. A. Krasil'nikov, Inst of Microbiol, Acad Sci USSR, Moscow, 13 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Divides Protophyta into two subgroups: Schizophyceae and Schizomyceteae, which in turn are divided into classes and orders. Submitted 12 Feb 1947.</p>				<p>processes of the cell so that the reduction process predominates. Submitted 29 Aug 1947.</p>			
FDB		70T54		FDB		70T53	
USSR/Medicine - Microorganisms Medicine - Plants, Diseases		Mar/Apr 1948		USSR/Medicine - Electrotherapy		Mar/Apr 1948	
<p>"Stimulants of Soft Rot in Cabbage Seeds," L. P. Starygina, N. A. Shishelova, Moscow Dept, All-Union Inst Agricultural Microbiol, 10 pp</p> <p>"Mikrobiol" Vol XVII, No 2</p> <p>Describes formation and isolation of the culture used in the experiments, and results obtained, including data on pathogenicity, morphological and cultural particulars, and various physiological characteristics. Submitted 5 Feb 1947.</p>				<p>"The Problem of Vascular Modification in the Cerebrum During Electroconvulsive Attacks," Docent I. M. Slivko, F. L. Ravikovich, Sci Collaborator, Chair of Psychiatry, Kiev Med Inst, Kiev Psychoneurol Inst, 2 1/2 pp</p> <p>"Nevropatol i Psikhiat" Vol XVII, No 2</p> <p>The blood supply of the eye can be considered the same supply system of the brain. Much detail is left out, however, and authors attempt to establish more exact boundaries for symptoms on which the course of electroconvulsive therapy is based. Submitted 16 Apr 1947.</p>			
FDB		70T55		FDB		70T56	

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FDB Periodical Abstracts Scientific No 70

RESTRICTED

USSR/Medicine - Paralysis, General  
Medicine - Penicillin

Mar/Apr 1948

"Experience With Combined Treatment of Progressive Paralysis With Penicillin and Malaria," A. I. Durandina, Psychiatric Clinic, Kirgiz Med Inst, 1 p

"Nevropatol i Psikhiat" Vol XVII, No 2

Penicillin is being tried in the treatment of progressive paralysis in attempt to determine method that is more effective than the so-called malarial therapy. Gives results of typical case where penicillin therapy was used. Submitted 19 Dec 1947.

FDB

USSR/Medicine - Psychiatry  
Medicine - Hexenal

70T57  
Mar/Apr 1948

"Clinical Observations on the Continuous Application of Hexenal in Psychiatric Practice," D. M. Kulik, Cand Med Sci, Chief Surg, Mogilev Psychiatric Hosp, 4 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Hexenal is effective substance in inhibiting chronic irritations and as such is valuable therapeutic addition of the psychiatric clinic. It is important to interrupt the course of the treatment to permit the patient days of rest. Narcosis may be produced without any particular preparation of the patient. The most effective enema is mixture of hexenal, 5.0 gum arabic and 50.0 water. Submitted 24 Mar 1947.

FDB

USSR/Medicine - Cysticercosis  
Medicine - Diagnosis

70T59  
Mar/Apr 1948

"The Problem of the Clinically and Pathomorphologically Different Forms of Encephalic Cysticercosis," Prof I. V. Lysakovskiy, Deputy, Psychiatric Clinic, Omsk Med Inst; Oblast Psychiatric Hosp, 5 1/2 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Diagnosis of cysticercosis is complicated as its symptoms are very similar to symptoms of brain tumors, and other serious diseases. Errors are made by even the most experienced practitioners and specialists. Briefly attempts to differentiate between clinical and pathomorphological forms of encephalic cysticercosis. Submitted 26 Feb 1946.

FDB

USSR/Medicine - Trauma  
Medicine - Craniology

70T61  
Mar/Apr 1948

"Book Reviews" 4 1/2 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Among the books reviewed is N. I. Grashchenkov's "Cranial and Encephalic Traumatism and Methods of Therapy." The 349-page book, published in 1947, is reviewed by Prof D. G. Shefer. Can be considered one of the most valuable postwar medical books. Records work done by Grashchenkov and his aides, and is valuable addition to Soviet medical knowledge.

FDB

USSR/Medicine - Dementia Praecox  
Medicine - Therapeutics

Mar/Apr 1948

"On the Indications for Electroconvulsive Therapy in Schizophrenia," Prof A. N. Molokhov, Kishinev Med Inst, 4 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Electron impulse therapy can be placed in the same class as impulse therapy. In both cases the convulsor is the basic instrument for therapeutical action on schizophrenia. The basic value of electron impulse therapy is that it can be used in combination with any other type of impulse therapy, even when treating chronic invalids. Submitted 10 Sep 1947.

FDB

USSR/Medicine - Pneumoconiosis  
Medicine - Prophylaxis

70T58  
Mar/Apr 1948

"Neuropsychiatric Symptomatology in Silicosis," Prof B. N. Serafimov, Inst of Regional Path, Acad Sci, Kazakh SSR, Chair of Psychiatry, Kazakh Med Inst, Alma-Ata, 3 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Explains some of the more interesting and yet vital problems in contemporary intoxication, silicosis, which in recent years has been thoroughly studied in the USSR, with regard to prophylactic measures and other aspects of interest to hygienists and pathologists. Submitted 29 Apr 1947.

FDB

USSR/Medicine - Paralysis, General  
Medicine - Penicillin

70T60  
Mar/Apr 1948

"Treatment of Progressive Paralysis With Penicillin," S. S. Kaliner, Cand Med Sci, Psychiatric Clinic, Naval Med Acad, 2 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Therapy is effective when penicillin is administered in large doses. It is possible to inject penicillin into the tissues six times every 24 hours in amounts of 40,000 Oxford units per dose. This treatment should be continued for only 20 days. The system of dosage and therapy still must be studied and improved. Submitted 23 Oct 1947.

FDB

USSR/Medicine - Psychiatry, History  
Medicine - Psychiatry, Progress

70T62  
Mar/Apr 1948

"Psychiatry in Turkmen SSR in the Thirty Years Since the Great October Socialist Revolution," Prof Ye. V. Maslov, Honored Worker of Sci, 2 1/2 pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Briefs history of psychiatry in Turkmen SSR. Submitted 2 Jan 1948.

FDB

FDB

70T63

70T64

<p>RESTRICTED</p> <p>FDB Periodical Abstracts Scientific No 70</p> <p>USSR/Medicine - Epilepsy Medicine - Therapeutics</p> <p>Mar/Apr 1948</p> <p>"Potassium Permanganate in the Therapy of Status Epilepticus," N. I. Repin, Riga, 1 p</p> <p>"Nevropatol i Psikhiat" Vol XVII, No 2</p> <p>Description of two cases to show the great significance of potassium permanganate in therapy for this affliction. Submitted 29 Dec 1946.</p>	<p>RESTRICTED</p> <p>USSR/Medicine - Botany Medicine - Apples</p> <p>Feb 1948</p> <p>"Review of S. P. Kedrin's Book, 'Parallelism of Variability Due to Similar Conditions of Growth'," D. Stankovic, 2 pp</p> <p>"Nauka i Tehnika" No 2</p> <p>Kedrin studied several types of apple trees of the Volga region: noted parallel changes in shape and color of fruit from different varieties of trees.</p>
<p>FDB</p> <p>YUGOSLAVIA/Medicine - Saponins Medicine - Sapotoxin</p> <p>70T65 Feb 1948</p> <p>"The Saponins," Viktor Kunc, 8 pp</p> <p>"Nauka i Tehnika" No 2</p> <p>Discusses generally the saponins and their effects on animals and humans. Elementary, and mentions no original experiments.</p>	<p>FDB</p> <p>YUGOSLAVIA/Medicine - Botany Medicine - Plants, Diseases</p> <p>70T66 Feb 1948</p> <p>"The Cause of Disease of Our Beech Forests," Mihailo Krstic, 7 pp</p> <p>"Nauka i Tehnika" No 2</p> <p>Describes symptoms, mechanism of infection, and stages of Ungulina fomentaria Pat., said to be greatest enemy of beech trees. Offers no specific methods to combat disease.</p>
<p>FDB</p> <p>USSR/Medicine - Tuberculosis Medicine - Therapy</p> <p>70T67 Mar/Apr 1948</p> <p>"Experience in the Use of Injections into the Lymph Glands in Lupus Tuberculosis," Docent Yu. L. Gutina, Moscow Inst of Tuberculosis of the Skin, 1 1/2 pp</p> <p>"Vest Venerol i Dermatol" No 2</p> <p>Good results obtained from the use of injections into the lymph glands in scrofuloderma tempted physicians to apply the same for lupus tuberculosis. Results of the treatments showed partial value of this type of therapy. Further experiments and studies are necessary. Dir of Moscow Inst of Tuberculosis of the Skin: I. N. Agapkin.</p>	<p>FDB</p> <p>USSR/Medicine - Gonococci Medicine - Penicillin</p> <p>70T68 Mar/Apr 1948</p> <p>"Variability of Gonococci During Penicillin Therapy," Prof N. M. Ovchinnikov, Second Dermovenereol Dispensary, Moscow, 3 pp</p> <p>"Vest Venerol i Dermatol" No 2</p> <p>Describes the four periods of variation that can be noticed in gonococci during penicillin therapy. Chief of Second Dermovenereol Dispensary: Dr V. G. Bronshteyn.</p>
<p>FDB</p> <p>USSR/Medicine - Gonorrhea, Therapy Medicine - Sulfanilimides and Derivatives</p> <p>70T69 Mar/Apr 1948</p> <p>"The Pathogenesis of Sulfa Resistance in Gonorrhea," K. A. Karysheva, Deputy, Clinic of Female and Children's Gonorrhea, Kiev Sci Res Dermovenereol Inst; Kiev Inst for Advancement of Doctors, 3 pp</p> <p>"Vest Venerol i Dermatol" No 2</p> <p>Lowered activity of organisms is one of the reasons for noneffectiveness of sulfa therapy in gonorrhea. Karysheva notes various other facts. States, however, that his work is far from completion, and that this article can be considered only as a preliminary work. Dir of Kiev Inst for Advancement of Doctors: I. I.</p> <p>FDB</p> <p>70T71</p>	<p>FDB</p> <p>USSR/Medicine - Dermatology Medicine - Arsphenamides</p> <p>70T70 Mar/Apr 1948</p> <p>"Deposits of Salvarsan Compounds in Dermal Histocytes Revealed by a Mercury-Quartz Lamp," M. M. Zheltakov, Chair of Dermatol and Venereal Diseases, Moscow Med Inst, Ministry of Pub Health RSFSR, 4 1/2 pp</p> <p>"Vest Venerol i Dermatol" No 2</p> <p>One of the most interesting results of the studies conducted by the author was the fact that there was prolonged accumulation of salvarsan in the cells of an active mesenchyme. It was found in the cells in the form of arsenobenzol. Studies of the basic molecule of this substance permit clarification of</p> <p>FDB</p> <p>70T72</p>

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FDB Periodical Abstracts Scientific No 70

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USSR/Medicine - Gonorrhea, Therapy Mar/Apr 1948  
(Contd)

Kal'chenko. Dir of Kiev Sci Res Dermovenereol Inst:  
D. M. Bukhalo.

USSR/Medicine - Dermatology (Contd) Mar/Apr 1948

the mechanisms of the action of arsenobenzol preparations. Deputy of Chair of Dermatol and Venereal Diseases: Prof N. S. Vedrov.

FDB

70T71

USSR/Medicine - Dermatology Mar/Apr 1948  
Medicine - Fungi

"Epidermophyton Rubrum in Experimentation," Ye. Ye. Sigalova, Cand Biol Sci, Deputy Mycol Lab, Cen Dermovenereol Inst, Ministry of Pub Health USSR, 2 pp

"Vest Venerol i Dermatol" No 2

Gives results of various tests conducted on this fungus, considered to be tropical fungus. Dir of Cen Dermovenereol Inst: E. M. Gol'dsil'ber.

FDB

70T72

USSR/Medicine - Syphilology Mar/Apr 1948  
Medicine - Training

"The Morphological System of Elements and Its Place in the Teaching of Dermatology and Syphilology in the Higher Medical Schools," Prof N. S. Vedrov, Corr Mem, Acad Med Sci USSR, Deputy, Chair of Dermatol and Venereal Diseases, Moscow Med Inst of Ministry of Pub Health RSFSR, 6 pp

"Vest Venerol i Dermatol" No 2

Correct diagnosis is essential to satisfactory therapy. Vedrov stresses the need for higher medical school students to be thoroughly familiar with the morphological system of elements. Dir of Moscow

FDB

70T73

USSR/Medicine - Gonorrhea, Therapy Mar/Apr 1948  
Medicine - Penicillin

"Principle Tasks in Gonorrheal Research," Prof I. M. Porudominskiy, 1½ pp

"Vest Venerol i Dermatol" No 2

Urges specialists to find better methods for treating gonorrhea in children with penicillin. Special attention must be paid to those cases that do not seem to respond to penicillin therapy, and studies made of the reasons for such a situation.

FDB

70T74

USSR/Medicine - Syphilology (Contd) Mar/Apr 1948

Med Inst of Ministry of Pub Health RSFSR: Docent Ye. N. Kovalev.

FDB

70T75

USSR/Medicine - Syphilis, Therapy Mar/Apr 1948  
Medicine - Syphilology

"Some Actual Problems of Modern Syphilology To Be Discussed at the Fifth All-Union Congress of Dermatologists and Venereologists," Prof V. A. Rakhmanov, Prof N. S. Smelov, 2 pp

"Vest Venerol i Dermatol" No 2

In the field of syphilology technicians will discuss the biology of Spirochaeta pallida, experimental syphilis, the serology, clinical treatment and course of syphilis during the war and postwar periods, and results from the use of new substances and new methods in syphilis therapy.

FDB

70T74

USSR/Medicine - Serum Mar/Apr 1948  
Medicine - Hemotherapy

"The Mechanism of the Action of the Complex Complement," O. V. Vinogradova, D. L. Ashavskaya, Serol Lab, Cen Dermovenereol Inst, 2½ pp

"Vest Venerol i Dermatol" No 2

Human serum in its complex state was not active component in the compound reaction. For purposes of economy, 2% solution of erythrocytes and 1:5 titrations of hemolysin were compounded. Found addition of human serum to the serum of guinea pigs produced no results.

FDB

70T76

FDB

70T77

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FDB Periodical Abstracts Scientific No 70

RESTRICTED

USSR/Medicine - Encephalitis  
Medicine - Case Records Mar/Apr 1948

"The Clinical Aspects of the Cochlear Vestibular Syndrome in Encephalitis," Ye. L. Shpayer, Cand Med Sci, Otorinol Cabinet, State Inst of Physiotherapy, 5 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Reports series of examinations of encephalitis patients. Tabulates results. Analyzes observations showing that cochlear vestibular symptoms with conflicting data of different tests, together with tonic atypical nystagmus, such as functional degeneration of the medullary and mesodiencephalic region, are characteristic for processes in the mesodiencephalic region.

FDB 70T78  
USSR/Medicine - Public Health  
Medicine - Otorhinolaryngology Mar/Apr 1948

"The Tasks of Soviet Public Health in the Development of Otorhinolaryngological Service," A. N. Shabonov, Deputy Minister of Pub Health USSR, 4 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Presents inaugural address to medical conference. Includes figures showing the incidence of otorhinolaryngological diseases in the USSR. At present there are only 2,404 ear, nose, and throat specialists in the Soviet Union. It is estimated that 4,000 are required.

FDB 70T80  
USSR/Medicine - Catarrh  
Medicine - Adrenal Preparations Mar/Apr 1948

"Anemization of the Eustachian Tube With Adrenalin During Treatment of Acute Catarrh of the Middle Ear," P. D. Buyev, Dr Med Sci, Kazan, 2 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Buyev describes his technique of anemization in detail. It takes 3-5 minutes and should be carried out twice daily during treatment. Method has been applied to over 100 cases since 1939, and is recommended to the attention of doctors.

FDB 70T82  
USSR/Medicine - Tuberculosis, Pulmonary Mar/Apr 1948  
Medicine - Deglutition, Disorders

"The Electrophoresis of Novocaine in the Field of the Jugular Neurovascular Group as a Method of Combating Dysphagia During Laryngeal-Pulmonary Tuberculosis," Lt Col A. B. Rabitskiy, Med Sv; Maj I. M. Vil'k, Med Sv, Yalta Gen Sanatorium No 1 of the Armed Forces, 4 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

The matter is of importance since 10-20% of tubercular patients admitted to the sanatorium in spring and autumn suffer from acute dysphagia. Describes the technique of electrophoresis: 1-5% solution of novocaine in 80° spirits being used with current of 0.15-

FDB 70T84

USSR/Medicine - Arachnoid, Inflammation Mar/Apr 1948  
Medicine - Surgery

"Review of E. Hald's Article, 'Arachnitis of the Encephalic Cistern'," F. B., 1 p

"Vest Oto-Rino-Laringol" Vol X, No 2

Hald gives the histories of four of his own cases on whom successful operations were performed.

FDB 70T79  
USSR/Medicine - Trauma  
Medicine - Aviation and Aviators Mar/Apr 1948

"Vestibular-Vegetative Disturbances in Members of Air Crews Having Closed Cranial Trauma," Ya. A. Kizil'shteyn, 2 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Reports examinations of 72 air crew personnel. Flying experience varied from under 1 to 10 years, trauma had been received from under 1 to 9 years prior to the examination. Only rarely discovered any vestibular-vegetative disturbance.

FDB 70T81  
USSR/Medicine - Penicillin  
Medicine - Otorhinolaryngology Mar/Apr 1948

"Penicillin Therapy for Certain Otorhinolaryngological Disturbances," I. A. Frankel, Ear, Nose, and Throat Dept, Shakhtinsk Municipal Hosp, 5 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Describes application of penicillin in five cases of severe otorhinolaryngological disturbance. Effected complete cure in four cases.

FDB 70T83  
USSR/Medicine - Deafness, Therapy Mar/Apr 1948  
Medicine - Hearing, Disorders

"The Role of an Artificial Tympanic Membrane as a Means of Improving Hearing," I. V. Filatov, Cand Med Sci, Hearing and Speech Combine Polyclinic, 4 pp

"Vest Oto-Rino-Laringol" Vol X, No 2

Investigation was carried out on 82 patients suffering from ailments of the middle ear, whose ages varied from 20 to 50 years. Used various materials for the artificial drums: cotton wool soaked in 0.5% solution of Protargol, microporous rubber, aspirin powder, etc. Care must be taken when using this prosthesis to avoid causing purulent inflammation.

FDB 70T85

RESTRICTED	FDB Periodical Abstracts Scientific No 70	RESTRICTED
USSR/Medicine - Tuberculosis, Pulmonary Mar/Apr 1948 (Contd)	USSR/Medicine - Deafness, Therapy (Contd)	Mar/Apr 1948
0.30 Ma for 10-15 minutes. Gives particulars of its successful application in the sanatorium.	tion of middle ear due to action of foreign body on mucous membrane.	
FDB	70T84	FDB
USSR/Medicine - Otitis Media Mar/Apr 1948 Medicine - Allergy	USSR/Medicine - Ear, Middle Medicine - Otology	70T85
"Review of Hjalmar Koch's Book, 'The Significance of Allergy in Chronic Otitis'," F. B., 2 p	"Review of Lars Preber's Book, 'Arachnitis of the Posterior Cerebral Cavity in an Otological Respect'," F. B., 1 p	Mar/Apr 1948
"Vest Oto-Rino-Laringol" Vol X, No 2	"Vest Oto-Rino-Laringol" Vol X, No 2	
Koch has studied 262 cases of chronic otitis from every angle. In 52 cases the discharges had high eosinophile counts, the remainder were aneosinophilic. The otitis of the 52 cases is attributed to allergy.	Arachnitis is frequently localized in the posterior cerebral cavity, in which case it is of otological interest, inasmuch as it may be caused by inflammation of the middle ear, or may develop as a result of an operation in this region. Unfortunately, exact diagnosis is impossible, in fact, arachnitis may even pass unnoticed when the usual autopsy methods are employed.	
FDB	70T86	FDB
USSR/Medicine - Hygiene and Sanitation, May 1948 Military Medicine - Venereal Disease	USSR/Medicine - Water, Examination Medicine - Water, Supply	70T87
"Study of the Medical and Sanitation Consequences of the War and Their Countermeasures," I. G. Ashkinazi, 5 pp	"Toxic Matter in the Drinking Waters of Irkutsk on Data of Spectral Analysis," Docent Ya. M. Grushko, S. A. Shipitsyn, Chair of Community Hygiene, Chair of Physics, Irkutsk Med Inst, 7 1/2 pp	May 1948
"Gig i San" Vol XIII, No 5	"Gig i San" Vol XIII, No 5	
Fourth conference on the above matter was held, 23-26 Dec 1947, by the Commission of the Presidium and the Institute of Public Health and Medical History, Acad Sci USSR. Gives brief summary of the speech of each delegate. Among diseases mentioned: typhus, malaria, venereal disease, and tuberculosis. Reports were read	Found waters in the rivers of Irkutsk contain toxic substances in excess of amounts contained in American rivers. Ground waters had higher toxic content than river waters. Largest amount of toxic matter was barium. Artesian waters contained 0.23 mg of barium per liter of water. Found spectral analysis to be very efficient.	
FDB	70T88	FDB
USSR/Medicine - Hygiene and Sanitation, May 1948 Military (Contd)	USSR/Medicine - Hygiene and Sanitation, Rural Medicine - Public Health	70T89
on conditions prevailing in various war-scarred regions, e.g., Moldavia, Kurelia, Stalingrad, and Ukraine SSR.	"On Regional Sanitation Councils and the Problem of Rural Sanitation Doctors," S. L. Tapel'son, 5 pp	May 1948
	"Gig i San" Vol XIII, No 5	
	Presents some of the provisions discussed at the 15 Nov 1941 meeting of the People's Commissariat for Public Health which will strengthen the status of regional medical sanitation councils, and some of the provisions which had been adopted.	
FDB	70T88	FDB
		70T90



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FDB Periodical Abstracts Scientific No 70

RESTRICTED

USSR/Medicine - Air, Impurities May 1948  
 Medicine - Hygiene and Sanitation, Industrial

"Study of Air During the Slaking of Coke by Phenol Waters of Coal-Tar Chemical Works, II," D. N. Kalyuzhnyy, L. M. Volova, E. S. Turetskaya, Ukrainian SSR Inst of Community Hygiene, Kiev, 3½ pp

"Gig 1 San" Vol XIII, No 5

When coke was slaked with drainage waters inside of towers, the phenol concentrate for area up to 1 km from the towers was considered to be negligible.

FDB

70T91

USSR/Medicine - Water, Supply May 1948  
 Medicine - Water, Examination

"A Case of the Practice of Sanitation Laboratory Control for the Quality of Tap Water," I. I. Belyayev, 1 p

"Gig 1 San" Vol XIII, No 5

Gives results of water tests on the Gor'kiy municipal water supply, 26 and 27 Aug 1944. Found source of contamination to be sunken barge (salt cargo), which met with disaster in the river above Gor'kiy.

FDB

70T93

USSR/Medicine - Air, Impurities May 1948  
 Medicine - Hygiene and Sanitation, Industrial

"Control of Contamination of the Air by Lead From the Molten Surfaces of Type Metals," V. G. Matsak, Gen Sanitary Hygienic Lab, Moscow, 2½ pp

"Gig 1 San" Vol XIII, No 5

Gives results of studies conducted to determine the total amount of lead vapors released from the molten surface of type lead under industrial methods of melting this type metal.

FDB

70T95

USSR/Medicine - Hygiene and Sanitation, May 1948  
 Industrial  
 Medicine - Mines and Miners

"Labor Conditions and Assanation Measures During the Extraction of Ozocerite," P. L. Braginskiy, Kiev Inst of Labor Hygiene and Occupational Diseases, 4½ pp

"Gig 1 San" Vol XIII, No 5

Ozocerite is mineral wax located in soft veins in sandy beds in the Borislava deposits. Hygienists are faced with the problem of proper removal of gases.

FDB

70T97

USSR/Medicine - Water, Examination May 1948  
 Medicine - Phosphorus and Its Compounds

"Phosphorus in Sanitation Appraisal of Water, II," Docent P. F. Pbukhov, Chair of Gen Hygiene, Molotov Med Inst, 3 pp

"Gig 1 San" Vol XIII, No 5

Discusses presence of phosphorus in river waters. An amount of phosphorus in river waters in excess of 0.2 mg per liter of water is due to contamination by human wastes. Open water bodies have amounts of phosphorus in excess of 0.05-0.07 mg per liter when contaminated by human wastes.

FDB

70T92

USSR/Medicine - Hygiene and Sanitation, May 1948  
 Industrial  
 Medicine - Legislation, Medical

"Practice of Inspection of Industrial Enterprises of the Zaporozhskiy Oblast," K. K. Bondarenko, 1½ pp

"Gig 1 San" Vol XIII, No 5

It is hoped that the Office of State Sanitation Inspection will determine exact sanitation laws that all organizations which are expecting to build in the future will abide by. It is also necessary to keep within sanitation requirements established by GOST.

FDB

70T94

USSR/Medicine - Hygiene and Sanitation May 1948  
 Medicine - Epidemiology

"All-Union Hydrobiological Council," N. M. Kabanov, ½ p

"Gig 1 San" Vol XIII, No 5

First meeting of the new scientific council was held 22 Dec 1947. On 27 Feb 1948 the council of hygienists met. Very interesting article by T. Ye. Boldyrev was read, "The Basic Trends and Pending Tasks for the VGSi and the Sanitary-Antiepidemiological Administration of the Ministry of Public Health USSR for 1948."

FDB

70T96

USSR/Medicine - Wounds, Gunshot Mar/Apr 1948  
 Medicine - Spinal Cord

"The Problem of Anabatic Systems in the Human Spinal Cord," M. M. Fil'shtinskiy, Neurosurg Lab, Leningrad Neurosurg Inst imeni Prof A. L. Polenov, 6½ pp

"Vopros Neyrokhirur" No 2

Facts are based on results of studies on the anabatic systems of the medulla to determine their characteristics when individuals have received gunshot wounds. Conducted research on the morphological trauma of the medulla. Paid particular attention to the degeneration of the anabatic fibrils in the frontal regions of the medulla. Deputy of Neurosurg Lab: Yu. M. Zhabotinskiy.

FDB

70T98

<del>RESTRICTED</del>	FDB Periodical Abstracts Scientific No 70		<del>RESTRICTED</del>
USSR/Medicine - Echinococcus Medicine - Brain	Mar/Apr 1948	USSR/Medicine - Meningitis Medicine - Wounds, Gunshot	Mar/Apr 1948
"Echinococcus of the Cerebrum, Unilocular and Multilocular, I," A. Ya. Sal'man, Leningrad Sci Res Neurosurg Inst, Ministry of Pub Health RSFSR, 6½ pp		"Clinical Aspects and Therapy of Acute Purulent Meningitis Arising From Subarachnoidal Hemorrhage Due to Encephalic Traumata," T. S. Malysheva, Cand Med Sci, Neurosurg Cen, Leningrad Front, 5 pp	
"Vopros Neyrokhirurg" No 2		"Vopros Neyrokhirurg" No 2	
Briefly describes some data on the intracranial distribution of single-cyst echinococcus, that form of the parasite which holds the greatest interest from the surgical standpoint; then briefly discusses multi-cyst echinococcus.		Gives results of studies conducted on 75 patients with gunshot wounds of the central nervous system to determine the clinical course and therapy of cases suffering from severe suppurative meningitis, due to subarachnoidal hemorrhage from brain and cranial wounds. Discusses case histories.	
FDB	70T99	FDB	70T100
USSR/Medicine - Neurosurgery Medicine - Bibliography	Mar/Apr 1948	USSR/Medicine - Salivary Glands Medicine - Nervous System	Mar/Apr 1948
"The Scientific Works of Andrey L'vovich Polenov on the Problems of Neurosurgery" 1½ pp		"The Six Levels of Functional Regulation in the Salivary Glands and Their Clinical and Physiological Significance," S. L. Levin, Dr Med Sci, Leningrad Neurosurg Inst imeni Prof A. L. Polenov; Clinic of Nervous Diseases, First Leningrad Med Inst imeni Academician I. P. Pavlov, 4 pp	
"Vopros Neyrokhirurg" No 2		"Vopros Neyrokhirurg" No 2	
Lists some 48 books, and articles written by Polenov.		Describes the cortical (hemispheric) level, the intermediate brain and middle brain level, and the bulbous level of regulation, the desympathization of the mastoid glands, and full local automatic denervation of glands.	
FDB	70T101	FDB	70T102
USSR/Medicine - Nervous System, Surgery Medicine - Cerebellum	Mar/Apr 1948	USSR/Physics Hydrodynamics Conductivity, Thermal	Apr 1948
"New Data on the Mechanism of the Primary-Cerebellar Reactions and Their Significance in Neurosurgical Clinical Work," A. Kh. Min'kovskiy, Dr Med Sci, Leningrad Sci Res Neurosurg Inst imeni Prof A. L. Polenov, 2½ pp		"The Molecular and Kinetic Basis for Hydrodynamics Equations," A. S. Predvoditelev, Corr Mem, Acad Sci USSR, Power Engr Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 16 pp	
"Vopros Neyrokhirurg" No 2		"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 4	
Article is written to acquaint physicians with pathological processes in the crus cerebelli in the region of the pons cerebelli.		Discusses development of hydrodynamics equations taking into consideration internal friction and the relation of heat conductivity from the standpoint of the hypothesis of elastic collision of molecules. Submitted Jan 1948.	
FDB	70T103	FDB	70T104
YUGOSLAVIA/Radio Receivers Radio Apparatus	Oct 1947	USSR/Soil Science Chemistry - Heat of Hydration	Mar/Apr 1948
"Midget Radio Set With RV Series Tubes," Bozidar Milobar, 3 pp		"Heat of Hydration of Soils," Ye. N. Gapon, L. A. Zuyev, All-Union Inst of Fertilizers, Agr Soil Studies; Agr Technol imeni K. K. Gedroyts, Agr Acad imeni K. A. Timiryazev, 10½ pp	
"Mladi Elektrotehnicar" No 6		"Kolloid Zhur" Vol X, No 2	
Gives instructions for radio amateurs for building midget radio set, with diagram and pictures. Mentions difficulty of obtaining materials for building radio apparatus.		Discusses the integral and differential heat of hydration, results of experiments, evaluation of results, and conclusions reached. Submitted 20 Jan 1947.	
FDB	70T105	FDB	70T106

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FDB Periodical Abstracts Scientific No 70

~~RESTRICTED~~

USSR/Soil Science  
Ions  
Absorption

Mar/Apr 1948

"The Nature of the Absorption of Ions by Clays and Soils: IV. Absorption of Bivalent Cations by Red-Borax Clays and Certain Soils," I. N. Antipov-Karatayev, G. M. Kader, V. N. Filippova, Soil Inst, Acad Sci USSR, Moscow, 10 pp

"Kolloid Zhur" Vol X, No 2

Describes replacement absorption of magnesium ions in Ca-clays, Ca-sub-ash soils and Ca-red clays, absorption of heavy metal ions on Ca-clay-covered surfaces, and results of the observations. Submitted 22 Mar 1947.  
FDB

70T107

List of Abbreviations  
used in FDB Periodical Abstracts

ID	Intelligence Division Library
AMC	Air Documents Division, Air Materiel Command
ST	Reference Division, State Department
BM	Bureau of Mines, Department of Interior
BS	National Bureau of Standards
SI	Smithsonian Institution
LC	Library of Congress
FDB	Foreign Documents Branch, CIA
COM	Department of Commerce
AF	A-2 Library, USAF

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